

Company: Pipe Line Const. and Drilling Co.  
 Farm: L. M. Fugate et al  
 Well No.: 1  
 Elevation: 2288.25' Gnd.  
 Total Depth: 6658'  
 Location: Buchanan Co.  
           9400' S. of 37°15'  
           400' E. of 81°55'

Geologic Log  
 Samples studied and  
 described by:  
 John M. Wilson  
 Virginia Division of  
 Mineral Resources  
 June, 1963

Drilling Commenced:  
 Well Completed:  
 Result: Gas Well  
        (P&A 1957)

GEOLOGIC LOG

Depth	Thickness	Description
0-2055	2055	No samples
2055-2066	11	Siltstone, variegated, locally finely sandy, light to medium gray, red, green, tan, moderately soft, flaky, no apparent bedding, siliceous, argillaceous, with; common biotite, common muscovite, common iron oxide stains
2066-2096	30	Sandstone, silty, white, clear, light gray, well cemented, very fine to fine grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with; common biotite, common muscovite, abundant chlorite, common carbonaceous material, rare iron oxide stains. Nonporous to slightly porous
2096-2112	16	Interbedded; Sandstone as in 2066-2096, with; Siltstone, locally shaly, carbonaceous (locally), light to dark gray, moderately hard, brittle no apparent bedding to poorly fissile, argillaceous, with; rare biotite, common muscovite, common carbonaceous material
2112-2155	43	Sandstone, white, milky, white, moderately cemented, very fine to medium grained, medium sorted, subrounded to angular, interstitially silty, siliceous, with; abundant biotite, abundant muscovite, common chlorite, rare carbonaceous material, rare iron oxide stains. Slightly porous

2155-2172	17	Siltstone, locally finely sandy, locally shaly, light to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with; rare biotite, rare muscovite, common carbonaceous material, rare iron oxide stains; Stringers of Sandstone, as in 2112-2155
2172-2208	36	Sandstone, white, clear, moderately cemented, fine to coarse grained, medium sorted, subangular, siliceous, with; common biotite, common muscovite, rare chlorite, common carbonaceous material, common iron oxide stains; Nonporous to slightly porous
2208-2220	12	Siltstone, locally shaly, light to medium gray, red (rare), green, moderately hard, brittle, no apparent bedding to poorly fissile, calcareous (very slightly), argillaceous, with; rare biotite, rare muscovite, rare carbonaceous material
2220-2230	10	Siltstone, shaly, medium gray, red, green (rare), moderately soft, flaky, poorly fissile, argillaceous, ferruginous, with; rare muscovite, rare carbonaceous material
2230-2240	10	Siltstone, variegated, locally finely sandy, locally shaly, light to medium gray, red, green, tan, brown, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, ferruginous, with; rare biotite, rare muscovite, rare carbonaceous material
2240-2251	11	Siltstone, locally finely sandy, locally shaly, medium gray (rare), red (rare), green, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with; common biotite, rare muscovite, rare carbonaceous material, rare iron oxide stains
2251-2340	89	Siltstone, as in 2340-2251, with green Siltstone grading to a very fine-grained Sandstone
2340-2354	14	Sandstone, silty, white, light gray, -green, well cemented, very fine to fine grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with; abundant biotite, abundant muscovite, common carbonaceous material, rare iron oxide stains, abundant silty-micaceous partings. Nonporous to slightly porous

2354-2464	110	Siltstone, grades locally to a very fine-grained Sandstone, locally finely sandy, light to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with; common muscovite, common carbonaceous material, common carbonaceous laminae, rare iron oxide stains
2464-2490	26	Siltstone, locally finely sandy, locally shaly, light to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with; rare biotite, abundant muscovite, common carbonaceous material, rare iron oxide stains
2490-2500	10	Shale, carbonaceous dark gray, black, moderately soft, flaky, good fissility, argillaceous, with; rare muscovite, common pyrite,
2500-2523	23	Shale, as in 2490-2500, silty, slightly calcareous
2523-2543	20	Sandstone, white, clear, well cemented, very fine grained, well sorted, subrounded, to subangular, interstitially silty, siliceous, with; common biotite, common muscovite, common carbonaceous material, abundant iron oxide stains, Nonporous to slightly porous
2543-2558	15	Siltstone, locally shaly, light to dark gray, brown, moderately hard, brittle, no apparent bedding to poorly fissile, calcareous (slightly), argillaceous, with; common biotite, common muscovite, rare carbonaceous material, rare iron oxide stains
2558-2600	42	Siltstone, locally finely sandy, locally shaly, to <sup>light</sup> medium gray, moderately hard, brittle, no apparent bedding to poorly fissile, calcareous (slightly), siliceous, argillaceous, with; abundant biotite, abundant muscovite, common carbonaceous material, rare iron oxide stains
2600-2610	10	Limestone, shaly, light to dark gray, moderately hard, oolitic (rare), fragmental fossil content, no apparent bedding, cryptocrystalline, with; rare mica, rare calcite, common carbonaceous material
2610-2615	5	Interbedded; Limestone, as in 2600-2610, with, Siltstone, locally shaly, red, green, moderately soft, flaky, poorly fissile, ferruginous, with; rare biotite, rare muscovite

2615-2620	5	Siltstone, as in 2610-2615
2620-2680	60	Siltstone, locally finely sandy, locally shaly, light to dark gray-green, moderately hard, brittle, no apparent bedding to poorly fissile, siliceous, argillaceous, with; common biotite, common muscovite, rare carbonaceous material, rare carbonaceous laminae, rare iron oxide stains
2680-2799	119	Sandstone, white, clear, well cemented, very fine to fine grained, well sorted, subrounded to angular, interstitially silty, siliceous, with; rare biotite, rare muscovite, abundant iron oxide stains, abundant silty-micaceous partings (contamination) Nonporous to slightly porous
2799-2816	17	No samples
2816-2865	49	Limestone, shaly, light to dark gray, moderately hard, fossils ( brachiopods, crinoids) fossil content, no apparent bedding, to platy, cryptocrystalline, with; rare mica, common calcite, rare carbonaceous material
2865-2880	15	Interbedded, Limestone, as in 2816-2865, with; Siltstone, locally shaly, red, moderately hard, brittle, no apparent bedding to poorly fissile, ferruginous, with; rare biotite, rare muscovite, rare carbonaceous material
2880-2890	10	Siltstone, locally finely sandy, locally shaly, light gray, red, green, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, ferruginous, with; rare biotite, common muscovite, rare carbonaceous material
2890-2927	37	Siltstone, micaceous, locally finely sandy, red, moderately soft, brittle, no apparent bedding, ferruginous, with; abundant biotite, abundant muscovite, rare carbonaceous material, rare iron oxide stains
2927-2937	10	Siltstone, locally finely sandy, light gray, red, moderately hard, brittle, no apparent bedding, argillaceous, ferruginous, with; common biotite, abundant muscovite, rare carbonaceous material.

2937-2954

17

Siltstone, as in 2927-2937, with stringers of Limestone, light gray, white, moderately hard, fragmental fossil content, no apparent bedding, cryptocrystalline to microcrystalline, with; rare mica, abundant calcite

2954-2972

18

Siltstone, micaceous, locally shaly, light gray, red, moderately soft, flaky, no apparent bedding, to poorly fissile, argillaceous, ferruginous, with; abundant biotite, abundant muscovite, rare carbonaceous material

2972-2982

10

No samples

2982-2992

10

Siltstone, locally shaly, red, green-gray, moderately hard, brittle, no apparent bedding, to poorly fissile, argillaceous, ferruginous, with; abundant biotite, abundant muscovite, rare carbonaceous material

2992-3003

11

Siltstone, locally shaly, light to dark gray, green, moderately hard, brittle, no apparent bedding to poorly fissile, calcareous (slightly), argillaceous, with; common biotite, common muscovite, common carbonaceous material, rare iron oxide stains

3003-3014

11

No samples

3014-3024

10

Shale, silty, light to medium gray, moderately soft, flaky, fair to good fissility, calcareous, argillaceous, with; common muscovite, rare carbonaceous material, rare iron oxide stains

3024-3044

20

Siltstone, shaly, light to dark gray, red(rare), green, moderately hard, brittle, poor to fair fissility, calcareous, argillaceous, with; rare biotite, common muscovite, common carbonaceous material

3044-3076

32

Siltstone, locally shaly, light gray (rare), red, moderately soft, flaky, no apparent bedding to poorly fissile, argillaceous, ferruginous, with; abundant biotite, abundant muscovite, rare carbonaceous material, rare iron oxide stains

3076-3095

19

Siltstone, locally shaly, light to dark gray, red, moderately hard, brittle, no apparent bedding to poorly fissile, calcareous (slightly) argillaceous, ferruginous, with; common biotite, abundant muscovite, rare pyrite, common carbonaceous material, rare iron oxide stains

3095-3105	10	Siltstone, locally finely sandy, locally shaly, light to dark gray, red (rare), moderately soft, brittle, poor to fair fissility, siliceous, argillaceous, with; abundant biotite, abundant muscovite,
3105-3151	46	Siltstone, as in 3095-3105, with stringers of, Sandstone, silty, white, light gray, well cemented, very fine grained, well sorted, subangular to angular, interstitially silty, siliceous, with; abundant biotite, abundant muscovite, common carbonaceous material, common iron oxide stains. Nonporous to slightly porous
3151-3158	7	Lithologies, as in 3105-3151, interbedded,
3158-3170	12	Siltstone, locally shaly, light to dark gray, moderately hard, brittle, poor to fair fissility, argillaceous, with; common biotite, abundant muscovite, common pyrite, abundant carbonaceous material, common iron oxide stains, Stringers of Sandstone, as in 3105-3151
3170-3178	8	Interbedded, Siltstone, as in 3158-3170, with; Dolomite, shaly, light brown, moderately hard, no apparent fossil content, platy, cryptocrystalline to microcrystalline, with; rare mica, rare carbonaceous material, common iron oxide staining
3178-3200	22	Siltstone, locally shaly, medium to dark gray, green-gray, moderately hard, brittle, no apparent bedding to poorly fissile, calcareous, argillaceous, with; rare biotite, rare muscovite, common carbonaceous material.
3200-3220	20	Sandstone, silty, white, clear, well cemented, very fine to fine grained, well sorted, rounded to subangular, interstitially silty, siliceous, with; common biotite, common muscovite, rare carbonaceous material, abundant iron oxide stains. Nonporous to slightly porous Stringers of Siltstone, as in 3178-3200
3220-3225	5	Lithologies as in 3200-3220, interbedded
3225-3238	13	Siltstone, locally finely sandy, shaly, medium to dark gray, moderately hard, brittle, poor to fair fissility, calcareous (locally) argillaceous, with; common muscovite, rare carbonaceous material, rare iron oxide stains

3238-3258	20	Siltstone, locally finely sandy, locally shaly, light to dark gray, red, green, moderately hard, brittle, no apparent bedding to poorly fissile, calcareous (locally), argillaceous, ferruginous, with; common biotite, common muscovite, rare carbonaceous material
3258-3276	18	Siltstone, as in 3238-3258, with rare red and green
3276-3291	15	Siltstone, carbonaceous (locally), medium to dark gray, moderately soft, flaky, no apparent bedding to poorly fissile, argillaceous, with; common biotite, common muscovite, rare pyrite, abundant carbonaceous material Stringers of Sandstone, silty, white, light gray, well cemented, very fine grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with; rare biotite, rare muscovite, common carbonaceous material, common iron oxide stains, Nonporous to slightly porous
3291-3307	16	Lithologies, as in 3276-3291, interbedded
3307-3312	5	Sandstone, white, clear, moderately cemented, very fine to fine grained, well sorted, subrounded to subangular, interstitially silty, siliceous; with; common biotite, common muscovite, rare carbonaceous material, abundant iron oxide stains. Nonporous to slightly porous. Stringers of Siltstone, locally shaly, medium to dark gray, moderately hard, brittle, poorly fissile, argillaceous, with; rare biotite, rare muscovite, common carbonaceous material
3312-3335	23	Lithologies, as in 3307-3312; interbedded
3335-3340	5	Sandstone, silty, white, moderately cemented, very fine grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with; rare biotite, common muscovite, rare chlorite, rare carbonaceous material, common iron oxide stains. Nonporous to slightly porous. Stringers of Siltstone, as in 3307-3312
3340-3356	16	Lithologies, as in 3335-3340, interbedded
3356-3377	21	Siltstone, locally finely sandy, light to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with; common biotite, common muscovite, rare carbonaceous material, common iron oxide stains
3377-3391	14	No samples
3391-3406	15	Siltstone, locally shaly, dark gray, red, green, moderately hard, brittle, no apparent bedding to poorly fissile, siliceous, argillaceous, with; common biotite, common muscovite, rare carbonaceous material

3406-3438	32	Siltstone, as in 3391-3406, grading locally a very fine-grained Sandstone
3488-3500	62	Sandstone, white, light gray, well cemented, very fine grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with; common biotite, common muscovite, rare carbonaceous material, abundant iron oxide stains. Nonporous to slightly porous. Stringers of Siltstone, light to medium gray, moderately soft, flaky, no apparent bedding to poorly fissile, argillaceous, with; rare muscovite, common iron oxide stains
3500-3529	29	Siltstone, locally shaly, light to dark gray, moderately hard, brittle, poor to fair fissility, argillaceous, with; rare muscovite, rare pyrite, common carbonaceous material, rare iron oxide stains
3529-3558	29	Siltstone, as in 3500-3529, with stringers of Sandstone, silty, white, light gray, well cemented, very fine to fine grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with; rare biotite, rare muscovite, rare pyrite. Nonporous to slightly porous
3558-3575	17	Sandstone, as in 3529-3558, with stringers of Siltstone, locally shaly, medium to dark gray, moderately soft, flaky, poorly fissile, argillaceous; with; rare biotite, common muscovite, common carbonaceous laminae, rare iron oxide stains
3575-3598	23	Siltstone, locally shaly, medium to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with; abundant biotite, abundant muscovite, common carbonaceous material, rare iron oxide stains. Minor stringers of Limestone, shaly, light gray, moderately hard, fossils (brachiopods) no apparent bedding to platy, cryptocrystalline to microcrystalline, with; rare mica, common calcite
3598-3646	48	Siltstone, as in 3575-3598, slightly calcareous
3646-3664	18	Limestone, light to dark gray, moderately hard, oolitic, fossils (abundant brachiopod, and crinoids) no apparent bedding, microcrystalline, with; rare mica, common pyrite, abundant calcite

3664-3680

16

Siltstone, locally finely sandy, locally shaly, light to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, calcareous, argillaceous, with; common biotite, abundant muscovite, common pyrite, rare calcite, rare carbonaceous material, rare iron oxide stains

3680-3690

10

Siltstone, locally shaly, medium to dark gray, moderately soft, flaky, no apparent bedding to poorly fissile, argillaceous, with; abundant biotite, abundant muscovite, common pyrite, abundant carbonaceous material, rare iron oxide stains

3690-3723

33

Interbedded; Siltstone, as in 3680-3690, with; Siltstone, locally finely sandy, light gray, moderately hard, brittle, no apparent bedding, argillaceous; with; abundant biotite, abundant muscovite, common carbonaceous material

3723-3729

6

No samples

3729-3791

62

Shale, locally silty, medium to dark gray, moderately hard, brittle, fair to good fissility, argillaceous, with; rare muscovite, rare pyrite, abundant carbonaceous material, common iron oxide stains

3791-3814

23

Shale, as in 3729-3791, with stringers of Limestone, light gray, moderately hard, fragmental fossil content, no apparent bedding, microcrystalline, with; rare mica, common calcite

3814-3837

23

Limestone, shaly, light to dark gray, moderately soft, fragmental (crinoid stems), fossil content, no apparent bedding, cryptocrystalline, with; rare mica, common pyrite, common calcite

3837-3920 =

83

Limestone, light to dark gray, moderately hard, fossils (crinoid stems, brachiopods), no apparent bedding, microcrystalline, with; abundant calcite

3920-3976

56

~~limest~~, argillaceous, medium to dark gray, moderately hard, brittle, fair to good fissility, calcareous, argillaceous, with; rare muscovite, common calcite, common fossils  
PYRITE

3976-3985

9

Limestone, light to dark gray, moderately hard, fossils, no apparent bedding, cryptocrystalline to microcrystalline, with; rare mica, common calcite

3985-4003

18

Siltstone, calcareous, locally shaly, light to medium gray, moderately hard, brittle, no apparent bedding to poorly fissile, calcareous, argillaceous, with; rare muscovite, common calcite, rare iron oxide stains

4003-4065

62

Limestone, silty, light gray, moderately hard, rare fragmental fossil content, no apparent bedding, cryptocrystalline, with; rare mica, common calcite, rare iron oxide staining

4065-4088

23

Limestone, light to dark gray, moderately hard, rare fragmental fossil content, no apparent bedding, cryptocrystalline to microcrystalline, with; abundant calcite, rare iron oxide staining

4088-4126

38

Limestone, light to dark gray, moderately hard, oolitic, common fragmental fossil content, no apparent bedding, microcrystalline, with; abundant calcite, rare iron oxide staining

4126-4133

7

Limestone, light to dark brown, moderately hard, oolitic (rare), rare fragmental fossil content, no apparent bedding, microcrystalline, with; abundant calcite, rare carbonaceous material

4133-4150

17

Limestone, light to dark gray, light brown, moderately hard, oolitic (locally), common fragmental fossil content, no apparent bedding, microcrystalline, common calcite, rare iron oxide staining

4150-4198

48

Limestone, light to dark brown, white, moderately soft, oolitic (locally), rare fragmental fossil content, no apparent bedding, microcrystalline, with; abundant calcite

4198-4229

31

Limestone, light to dark gray, dark brown, moderately hard, oolitic (rare), fragmental fossil content, no apparent bedding, cryptocrystalline to microcrystalline, with; rare mica, abundant calcite, rare iron oxide staining

4229-4240	11	Limestone, light to dark gray, moderately hard, rare fragmental fossil content, no apparent bedding, microcrystalline, with; common calcite
4240-4255	15	Limestone, as in 4229-4240, with abundant calcite
4255-4290	35	Limestone, dolomitic?, white, light, light green-gray, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline to microcrystalline, with; abundant calcite, common carbonaceous material, rare iron oxide staining
4290-4340	50	Limestone, light to dark brown, tan, white, moderately hard, oolitic (locally), fragmental (rare) fossil content, no apparent bedding, cryptocrystalline, with; common calcite
4340-4375	35	Limestone, light to dark brown, moderately hard, oolitic (rare), fragmental fossil content, no apparent bedding, cryptocrystalline to microcrystalline, with; abundant calcite
4375-4386	11	No samples
4386-4521	135	Limestone, as in 4340-4375
4521-4570	49	Limestone, as in 4386-4521, with; abundant chert
4570-4595	25	Siltstone, light to medium gray (common), <sup>red</sup> moderately hard, brittle, no apparent bedding, calcareous (slightly), ferruginous, with; rare biotite, rare muscovite, rare carbonaceous material
4595-4630	35	Siltstone, locally finely sandy, light to dark gray, red (rare) green, moderately soft, flaky, no apparent bedding, siliceous, argillaceous, with; common biotite, abundant muscovite, rare carbonaceous material, rare iron oxide stains
4630-4665	35	Siltstone, locally finely sandy, light to medium gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with; common biotite, abundant muscovite, rare carbonaceous material, rare iron oxide stains
4665-4770	105	Siltstone, as in 4630-4665, grades locally to a very fine-grained Sandstone
4770-4777	7	No samples
4777-4883	106	Interbedded Siltstone, locally finely sandy, light to medium gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with; common biotite, common muscovite, rare carbonaceous material, common iron oxide stains, Shale, locally silty, dark gray, moderately soft, flaky, fair to good fissility, argillaceous, with; rare muscovite, rare iron oxide stains

4883-4958	75	Shale, as in 4777-4883
4958-4983	25	Shale, as in 4777-4883, with abundant chert (milky white, tan)
4983-5076	93	Shale, locally silty, medium to dark gray, brown, moderately hard, brittle, poor to fair fissility, argillaceous, with; common muscovite, rare carbonaceous material, rare iron oxide stains
5076-5155	79	Shale, medium gray, moderately soft, brittle, fair to good fissility, argillaceous, with; rare muscovite, rare carbonaceous material, rare iron oxide stains
5155-5158	3	No samples
5158-5175	17	Shale, as in 5076-5155, with minor stringers of Siltstone, locally finely sandy, light gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with; abundant biotite, abundant muscovite
5175-5204	29	Interbedded Shale, carbonaceous, black, soft, flaky, fair to good fissility, argillaceous, with; rare muscovite, abundant carbonaceous material. Shale, locally silty, medium to dark gray, moderately hard, brittle, fair to good fissility, argillaceous, with; rare biotite, common muscovite
5204-5220	16	Siltstone, locally shaly, light to medium gray, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with; common biotite, common muscovite, abundant pyrite, rare iron oxide stains. Stringers of Siltstone, carbonaceous, dark gray, moderately soft, brittle, argillaceous, with; rare muscovite, rare iron oxide stains
5220-5229	9	Lithologies, as in 5204-5220, with minor stringers of Sandstone, silty, white, light gray, well cemented, very fine grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with; common biotite, common muscovite, rare carbonaceous material, common iron oxide stains. Nonporous to slightly porous
5229-5250	21	Interbedded; Sandstone, as in 5220-5229, with; Siltstone, shaly, medium to dark gray, moderately hard, brittle, poor to fair fissility, argillaceous, with; rare muscovite, rare iron oxide stains

5250-5313	63	Siltstone, carbonaceous (locally), dark gray to black, moderately hard, brittle, fair to good fissility, argillaceous, with; common muscovite, abundant carbonaceous material, rare iron oxide stains
5313-5341	28	Siltstone, locally finely sandy, light to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with; common biotite, common muscovite, abundant carbonaceous material, rare iron oxide stains
5341-5351	10	No samples 5351-5391
5351-5591	260	Interbedded Siltstone, locally finely sandy, light to medium gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with; rare biotite, common muscovite Shale, locally silty, medium to dark gray, moderately soft, flaky, fair to good fissility, argillaceous, with; rare muscovite, rare iron oxide stains
5591-5594	3	No samples
5594-5603	9	Siltstone, locally finely sandy, locally shaly, light to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, siliceous, argillaceous, with; abundant biotite, abundant muscovite, common carbonaceous material, rare iron oxide stains
5603-5665	62	Interbedded Siltstone, as in 5594-5603 Shale, medium to dark gray, moderately hard, brittle, poor to good fissility, argillaceous, with; common muscovite, rare carbonaceous material, rare iron oxide stains
5665-5666	1	No samples
5666-5805	139	Lithologies, as in 5603-5665
5805-5815	10	No samples
5815-5838	23	Lithologies, as in 5666-5805
5858-6006	168	Interbedded Siltstone, locally finely sandy, light to medium gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with; common biotite, abundant muscovite, rare iron oxide stains Shale, carbonaceous (locally), black, moderately soft, flaky, argillaceous, abundant biotite, abundant muscovite, abundant carbonaceous material, abundant carbonaceous laminae, rare iron oxide stains

6006-6021	15	No samples
6021-6110	89	Lithologies as in 5838-6006
6110-6179	69	Siltstone, locally finely sandy, locally shaly, light to medium gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with; abundant biotite, abundant muscovite, rare carbonaceous material
6179-6301	122	Interbedded; Siltstone, as in 6110-6179, with; Shale, locally silty, dark gray, moderately soft, flaky, fair to good fissility, argillaceous, with; rare biotite, common muscovite, common carbonaceous material
6301-6344	43	Siltstone, locally finely sandy, locally shaly, carbonaceous (locally), light to dark gray, moderately soft, flaky, no apparent bedding, to poorly fissile, siliceous, argillaceous, with; abundant biotite, abundant muscovite, abundant carbonaceous material
6344-6350	6	Siltstone, as in 6301-6344, with less carbonaceous material
6350-6387	37	Siltstone, as in 6301-6344
<i>Dusty?</i> 6387-6449	62	Siltstone, as in 6301-6344, with stringers (minor) of Sandstone, white, tan, well cemented, very fine to fine grained, well sorted, subrounded to angular, interstitially silty, siliceous, with; common biotite, abundant muscovite, common iron oxide stains. Slightly porous
6449-6513	64	Interbedded Shale, carbonaceous, black, moderately soft, flaky, good fissility, argillaceous, with; rare muscovite, common pyrite, rare iron oxide stains. Siltstone, shaly, light to medium gray, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with; common biotite, abundant muscovite, rare iron oxide stains
6513-6614	101	Carbonaceous Shale, as in 6449-6513, with minor stringers of Siltstone, as in 6449-6513
6614-6639	25	Lithologies, as in 6513-6614, with; abundant pyrite
6639-6653	14	Siltstone, locally shaly, light to medium gray, moderately hard, brittle, poor to fair fissile, argillaceous, with; rare biotite, abundant muscovite, rare pyrite, Stringers of Shale, carbonaceous as in 6513-6614
6653-6658	5	No samples
6658'	-	T.D.

GEOLOGIC SUMMARY

Mississippian System

Bluestone Formation	in	2055
	bottom	2615
Princeton Sandstone	top	2615
	bottom	2808 <sup>+</sup>
Hinton Formation	top	2808 <sup>+</sup>
	bottom	3500
Stony Gap Sandstone	top	3105
	bottom	3500
Bluefield Formation	top	3500
	bottom	3791
Greenbrier Limestone	top	3791
	bottom	4570
Maccrady-Price Formations	top	4570
	bottom	4883

Mississippian-Devonian Systems

Big Stone Gap Shale	top	4883
	bottom	5220

Devonian - Pre-Devonian Systems

Devonian - Pre-Devonian undivided	top	5220
	(deepest sample	6653)

Correlations by: J. M. Wilson and R. C. Milici

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